

Serial No. 10/726,963

PATENT

Remarks

In the Office Action of April 18, 2007 claims 1 to 12, 15 and 16 are pending of which claims 15 and 16 were allowed and 1 to 12 were rejected.

In particular:

- Claims 1 to 5, 7, 9 to 12 were rejected under 35 USC 102(e) as being anticipated by DePalma et al (US 2002/058985).
- Claim 6 is rejected under 35 USC 103(a) as being unpatentable of DePalma et al (US 2002/058985) in view of Nobles et al (US 20020049453).
- Claim 8 is rejected under 35 USC 103(a) as being unpatentable over DePalma et al (US 2002/058985).

The Examiner has indicated that claims 15 and 16 have allowable subject matter and we thank the Examiner for the indication of allowance, however, the applicant believes that claims 1 to 12 are also not anticipated and patentable over the new references cited by the Examiner as explained below.

No claim amendments are made by this response.

Claim 1 of this present application as previously amended claims a prosthesis which is for treatment by intraluminal placement of aortic dissection caused by a rupture in the wall of an aorta of a patient. The prosthesis has a plurality of self expanding stents with at least one of the stents having a biocompatible graft material cover defining a covered stent portion and an uncovered stent portion. Support for the terms "covered stent portion" and "uncovered stent portion" can be found on page 10 lines 10 to 12 for instance. The covered stent portion is to close off the rupture in the wall of a lumen and the uncovered stent portion is to provide pressure on the wall of the lumen adjacent to and extending away from the rupture to deflate the false lumen caused by a aortic dissection. The importance of the use of self expanding stents for the provision of this pressure to deflate the false lumen resulting from an aortic dissection is discussed on page 9 in the paragraph which discusses Figure 5.

We refer the examiner to the portion of page 9 which states:

Serial No. 10/726,963

" The stents provide gradual pressure on the wall of the lumen to close the false lumen and open up the true lumen."

It should be particularly noted by the Examiner that the claim defines self-expanding stents as these are elastic and will tend to provide continuous pressure against the wall of a lumen after deployment. The claim also specifies that the self expanding stents are linked together by links.

The use of uncovered stents to provide pressure on the wall of the lumen adjacent to and extending away from the rupture to deflate the false lumen is important because in this region there may be branch vessels extending from the aorta and an uncovered stent will not cause occlusion of these branch vessels. Occlusion could result in partial paralysis in a patient.

It is also important that the prosthesis is a single component so that it can be quickly deployed when necessary. A significant number of aortic dissections are caused by accidental trauma and speed is of the essence in treatment. Having only a single component to deliver to the rupture site in the aorta means that treatment can be achieved quickly.

With respect we submit the specification DePalma et al (US 2002/058985) cited by the Examiner discloses a quite different type of system and it does appear that the examiner has misunderstood the nature of that disclosure. DePalma et al discloses a three component device for treatment of aortic aneurysms particularly between the renal arteries and the aortic bifurcation. The device of the present invention in contradistinction is a single component. The first component of DePalma et al is a first prosthesis which is a single expandable stent with a covering material and is used to provide a proximal anchoring point for another component, a third prosthesis. The second component of DePalma et al is a second prosthesis which is a single expandable stent with a covering material and is used to provide a distal anchoring point for the other component, the third prosthesis. The third component of DePalma et al is the third prosthesis which is a bypass conduit which provides a fluid flow path between the first prosthesis and the second prosthesis when it is deployed between them. The third

Serial No. 10/726,963

PATENT

prosthesis is a stent completely covered by graft material as shown in Figure 4 of DePalma, for instance.

The first component of DePalma et al, the first prosthesis, does not have a construction as defined in claim 1 of the present application. It does not have a plurality of self expanding stents linked together by links, it only has a single stent. It does not have an uncovered portion which is a plurality of stents linked together and extending away from a covered portion. The spaced apart longitudinal legs (20) of DePalma are not a plurality of stents linked together.

The second component of DePalma et al, the second prosthesis, is of substantially the same construction as the first prosthesis and for the same reasons does not teach or suggest the device as claimed on claim 1.

The third component of DePalma et al, the third prosthesis is a stent covered by a graft material to form a conduit with fluid impervious walls. This third prosthesis does not have plurality of self expanding stents linked together by links and defining an elongate substantially cylindrical lumen wall engaging surface and at least one of the stents having a bio-compatible graft material cover thereby defining a covered stent portion and an uncovered stent portion. There is no uncovered stent portion. If the conduit of DePalma et al was used to provide pressure on the wall of the lumen adjacent to an extending away from the rupture to deflate the false lumen caused by a aortic dissection there could be a problem with closing off of branch vessels as discussed above.

No one of the components of DePalma et al has the features of claim 1 nor do the three components together have the defined features.

The examiner has drawn our attention to links 54, 56 discussed in para [0126] of DePalma et al but these components are connectors which are used to join the third prosthesis to the first prosthesis and the third prosthesis to the second prosthesis respectively.

We submit therefore that the reference DePalma et al does not teach or suggest the use of linked together self-expanding stents and particularly uncovered stents to be used in a device for the treatment of an aortic dissection and claim 1 is novel and inventive over this reference.

Serial No. 10/726,963

PATENT

With reference to claims 2 to 5, 7, 9 and 10 to 12 we submit that these claims depend from claim 1 which is not anticipated by DePalma et al and these claims too are not anticipated and are patentable over the reference DePalma.

With reference to Claim 6 being rejected under 35 USC 103(a) as being unpatentable of DePalma et al (US 2002/058985) in view of Nobles et al (US 20020049453) we submit that as discussed above the reference DePalma does not disclose the device as defined in claim 1 and further does not teach or suggest the use of a thread or suture to connect stents. The paragraph [0089] does not discuss linking one stent to another by the use of fibers but in fact discusses the use of fibers in a range of forms for the covering of the stents. We submit that as Claim 6 depends from a patentable claim 1, that this claim too is novel and inventive over the cited references taken either singly or in combination.

With respect to claim 8 being rejected under 35 USC 103(a) as being unpatentable over DePalma et al (US 2002/058985) we submit that as this claim depends from a patentable claim 1, that this claim too is novel and Inventive over the cited reference.

The re-examination and reconsideration of this application is respectfully requested and it is further requested that this application be passed to issue.

Although the foregoing discussion is believed to be dispositive of the issues in this case, applicants' attorney requests a telephone interview with the Examiner to further discuss any unresolved issues remaining after the Examiner's consideration of this amendment.

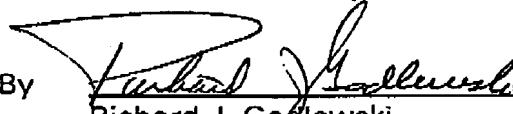
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Date:

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